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Title : Marine Mammals - useful target species in large-scale conservation efforts

Category : Conservation

Student :

Preferred Format : Either Oral or Poster Presentation

Abstract : Over the past decade, scientists, conservationists and resource managers have realized that the maintenance of biodiversity and the conservation of resources must go beyond the protection of species and/or unique environmental features. Instead, we must address multiple levels of biological organization, identifying species and processes that need to be preserved, managed and restored, in order to represent the entire diversity of a reasonably cohesive ecological unit with viable populations, communities and ecosystems. The process of defining such Eco-regions includes the identification and compilation of data on ecology and distribution of conservation targets.

The selection criteria for such targets include a perceived degradation or threat, whether from habitat destruction (fragmentation) or overexploitation, the usefulness to serve as an umbrella species, and the availability of sufficient information to map the status and extent of a target. Marine mammals represent useful target species, especially in areas where long-term studies of individual populations have gathered a wealth of species and habitat related data. Atlantic spotted dolphins (*Stenella frontalis*) and humpback whales (*Megaptera novaeangliae*) have been selected as target species in large-scale conservation efforts in the Caribbean to represent processes such as population dynamics, states of deep and shallow water resources and acoustic integrity, and gradients in temperature. Together with raster-based habitat mapping, eco-regional planning provides an important tool to scientists and managers.